

The Effects of Periorbital Massage on Chemotherapy-induced Nausea and Vomiting among Patients with Gastrointestinal Cancers: A Phase II Single-Blind Randomized Controlled Trial

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Abstract

Introduction: The aim of this study was to investigate the effects of periorbital massage on chemotherapy-induced nausea and vomiting among patients with gastrointestinal cancers.

Materials and Methods: This single-blind two-group randomized controlled trial was done on sixty patients with gastro-esophageal or colorectal cancers. They were recruited consecutively from the hematology care ward of Imam Khomeini hospital, Ardabil, Iran, and randomly allocated to a massage and a control group. Patients with gastro-esophageal and colorectal cancers were hospitalized to receive four- and three-day chemotherapy, respectively. Patients in the massage group were provided with fifteen-minute periorbital massage using an electronic eye massager. Massage therapy for patients with gastro-esophageal and colorectal cancers was provided respectively in the fourth and the third days of chemotherapy, i.e. while patients were receiving their most nauseating chemotherapy agent. Patients in the control group received no massage therapy. Rhodes Index of Nausea, Vomiting, and Retching were used to collect data both before and 24 hours after the administration of the most nauseating chemotherapy agent. Data analysis was done using the independent-sample t and the Chi-square tests.

Results: Before the intervention, study groups did not significantly differ from each other regarding nausea and vomiting ($P > 0.05$). However, after the intervention, chemotherapy-induced nausea and vomiting in the control group was significantly more severe than the massage group ($P < 0.05$).

Conclusions: Periorbital massage using electronic eye massager is effective in relieving chemotherapy-induced nausea and vomiting among patients with gastrointestinal cancers. Still, further studies are needed to produce ample evidence.